CLAIMS

1. An information retrieval apparatus comprising a mapping processor operable

to receive data representative of a map of information items from a set of information items identified in a search, the map providing the identified information items with respect to positions in an array in accordance with a mutual similarity of the information items, similar information items mapping to similar positions in the array, and

to process the map data to form a hierarchical clustering of information items providing a first clustering level of information items and at least one other clustering level of information items for clusters of information items within the first level clusters.

2. An apparatus as claimed in Claim 1, wherein the information items include a plurality of characterising information features, the characterising information features of each information item being used to form a feature vector for each information item, the feature vector being used to form the map data by mapping the information item onto a position within the array.

3. An apparatus as claimed in Claim 1, wherein the mapping processor is operable to provide the first clustering level of information items with a characterising information feature associated with each of the first level clusters of information items and to provide a characterising information feature for the clusters of information items within the first level clusters at the other hierarchical level.

4. An apparatus as claimed in Claim 1, wherein the characterising information feature associated with each first level cluster and the other characterising information feature associated with each cluster within the other clustering level of information items are formed from a most common characterising information feature present in the information items associated with each cluster.

5.   An apparatus as claimed in Claim 1, wherein the clusters of information items within one of the lower level clusters are associated with one another, whereas the other clusters of the first level are additional clusters of information items with respect to the information items within the lower level cluster.

6.   An apparatus as claimed in Claim 3, wherein the characterising information item associated with each cluster is the most common word of the textual information associated with each of the information items within each cluster.

7.   An apparatus as claimed in Claim 1, wherein the information items comprise textual information, the characterising information features being words, and the feature vector for an information item is representative of a set of frequencies of occurrence, within that information item, of each of a group of words.

8.   An apparatus as claimed in Claim 7, wherein the information items include textual information, the characterising information features being words, the positions within the array being mapped by mutual similarity of at least a part of the textual information.

9.   An apparatus as claimed in Claim 7, wherein the information items are pre-processed for mapping by excluding words occurring within the textual information having more than a threshold frequency amongst the set of information items.

10.   An apparatus as claimed in Claim 7, wherein the information items are pre-processed for mapping by excluding words occurring within the textual information having less than a threshold frequency amongst the set of information items.

11.   An apparatus as claimed in Claim 1, comprising
a display processor operable in combination with a graphical user interface to display a representation of at least some of the positions of the array corresponds to identified information items as an n-dimensional display array of display points within a display area on a graphical display.

12.   An apparatus as claimed in Claim 11, wherein the display area includes at least two areas, one area providing an n-dimensional representation of the first hierarchical level of clusters and the other area providing an n-dimensional representation of the other hierarchical level of clusters, where n is an integer.

13.   An apparatus claimed in Claim 11, comprising

search processor for carrying out a word-related search of the information items;

the search processor and the graphical user interface being arranged to co-operate so that only those display points corresponding to identified information items are displayed.

14.   An apparatus as claimed in Claim 11, wherein the display processor is operable to generate data representative of an indication which when displayed on the graphical user interface provides a user when viewing a first cluster in one of the hierarchical levels of a relative direction within an n-dimensional space of the location of another cluster within the hierarchical level.

15.   An apparatus as claimed in Claim 14, wherein the display processor is operable to generate data representative of the number of information items within the other cluster, the number of information items being associated with the indication of the relative direction in the n-dimensional space of the other cluster with respect to the first cluster.

16.   An apparatus as claimed in Claims 14, wherein the display processor is operable in combination with the graphical user interface to display the indication of the relative direction of the other cluster within the first area of the graphical display, and the data representing the number of information items within the cluster is displayable with respect to the indication.

17.   An apparatus as claimed in Claim 16, comprising

a user control for selecting information items or clusters of information items within the n-dimensional space using a user controlled pointer, wherein the number of information items are display with respect to the indication of relative direction, in response to the pointer being positioned over the indication.

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18.   An apparatus as claimed in Claim 12, wherein the number of dimensions n is two.

19.   Video acquisition and/or processing apparatus comprising

10   an information retrieval apparatus as claimed in any preceding claim, wherein the information items include video data with the textual information.

20.   Video acquisition and/or processing apparatus as claimed in Claim 19, comprising

15   a repository containing the information items, and

a data communications network for connecting the repository with the information retrieval apparatus.

21.   Video acquisition and/or processing apparatus as claimed in Claim 19,

20   wherein the information items include a representative key stamp providing a representative image from the information item.

22.   Video acquisition and/or processing apparatus as claimed in Claim 21, wherein the common characterising information feature associated with a cluster includes

25   a representative key stamp which is common to the cluster.

23.   A method of retrieving and displaying information comprising

receiving data representative of a map of information items from a set of information items identified in a search, the map providing the identified information

30   items with respect to positions in an array in accordance with a mutual similarity of the information items, similar information items mapping to similar positions in the array, and

processing the map data to form a hierarchical clustering of information items providing a first clustering level of information items and at least one other clustering level of information items for clusters of information items within the first level clusters.

5   24.   A method as claimed in Claim 23, wherein the processing the map data includes

providing the first clustering level of information items with a characterising information feature associated with each of the first level clusters of information items and

10   providing a characterising information feature for the clusters of information items within the first level clusters at the other hierarchical level.

25.   A method as claimed in Claim 24, wherein the information items include a plurality of characterising information features, the characterising information features of

15   each information item being used to form a feature vector for each information item, the feature vector being used to map the information item onto a position within the array.

26.   A method as claimed in Claim 23, comprising

displaying a representation of at least some of the positions of the array as an n-

20   dimensional display array of display points within a display area on a graphical display.

27.   A method as claimed in Claim 26, wherein the display area includes at least two areas, one area providing an n-dimensional representation of the first hierarchical level of clusters and the other area providing an n-dimensional representation

25   of the other hierarchical level of clusters.

28.   A method as claimed in Claim 27, wherein the number of dimensions n is two.

30   29.   Computer software having program code for carrying out a method according to any one of claims 23 to 27.

30.   A medium for providing program code according to claim 29.

31.   A medium according to claim 30, the medium being a storage medium.

5   32.   A medium according to claim 30, the medium being a transmission medium.